## Response to Comments Document For the Draft 2004 Integrated Water List Public Comment Period (Public noticed October 20, 2003)

This Response to Comment document was prepared pursuant to Sections 303(d) of the Federal Clean Water Act

State of New Jersey
Department of Environmental Protection
Land Use Management
Bureau of Water Quality Standards and Assessment

March 1, 2004

## Response to Comments Document For the

## 2004 Integrated Water List Public Comment Period (Public Noticed October 20, 2003)

## **Commenters:**

- 1. Widener University Environmental and Natural Resources Law Clinic on behalf of the Delaware Riverkeeper Network.
- 2. New Jersey Pinelands Commission. John C. Stokes, Executive Director.
- 3. USEPA Region II
- 4. Sussex County Municipal Authority, John Hatzelis, Administrator and Thomas Varro, P.E., Chief Engineer

Note: This Response to Comment Document responds to comments provided on the Proposed 2004 Integrated List public noticed for comment on October 20, 2004. The Department also received comments on the draft Integrated Water Quality Monitoring and Assessment Methods. The draft Methods Document was public noticed on June 2, 2003 with a 30 day comment period. Many of the comments on the Methods Document were redundant with those submitted to the Department during the public comment period for the Methods Document and have been responded to in the Response to Comment Document for the Methods Document. The final version of the Methods Document which was used to develop the 2004 Integrated List and the Response to Comment Document are available on the Department's

http://www.state.nj.us/dep/wmm/sgwqt/wat/integratedlist/integratedlist2004.html. Although the comments on the Methods Document will not be formally responded to in this document, the Department will take them into consideration when revising the Methods Document for the 2006 Integrated List.

Comment 1: The Commenter commends the Department on the timely submission of the proposed 2004 Integrated List in accordance with the CWA §303(d) requirements and its decision to follow USEPA's "Guidance for 2004 Assessment Listing and Reporting Requirements Pursuant to Sections 303(d) and 305(b) of the Clean Water Act", (TMDL-01-03, July 2003) for the format of the List. (1)

**Response to Comment:** The Department acknowledges the commenter's support.

**Comment 2:** Waterbodies were moved to Sublist 1 based upon new data showing compliance with the water quality criteria. The available data, however, does not provide sufficient detail to clearly identify all waterbodies that were delisted and/or to support the associated delisting rationale for each waterbody. We respectfully request that this information be made available for public review and comment as part of the proposed 2004 Integrated List as well as future lists. (1)

**Response to Comment:** The Integrated List includes a column entitled "Parameters Delisted" which identifies the Waterbody/Parameter combinations that are being delisted. The Department also provided information in the Integrated List which identified the source of the data. The data is available upon request from the data provider identified in the List.

**Comment 3:** A comparison of the 2002 and proposed 2004 Integrated Lists currently available for public review from the NJDEP website reveals significant discrepancies. Nearly 60 impaired waters that were included on Sublist 5 of the 2002 Integrated List are missing from the proposed 2004 Integrated List.(1)

**Response to Comment:** The Department agrees with the commenter and has added the waterbodies in the revised proposed 2004 Integrated List (3/1/04).

**Comment 4:** Gun Branch at Rt. 206 in Hammonton (AN0568G) should be listed on Sublist 3 rather than Sublist 5. (2)

**Response to Comment:** The AMNET site referenced has been moved to Sublist 3 as per the comment.

**Comment 5:** We have two comments with regard to assessing AMNET sites in the Pinelands as having "Insufficient Data." First, these sites should be placed in a category of "Not Classified" because sufficient data <u>do</u> exist for a biological assessment using the AMNET macroinvertebrate data. The problem is with the interpretation of the AMNET data, not the lack of data. (2)

Response to Comment: The statement that sufficient data regarding benthic invertebrates do exist is true; however, they are not currently useful in delineating biological status regarding disturbed vs. undisturbed conditions within the Pinelands. The Department utilizes Sublist 3 to identify waters where data or assessment methods are insufficient to characterize the status of impairment (see Section 8.1 of the Integrated Water Quality Monitoring and Assessment Methods (March 1, 2004)). List 3 is labeled as "Insufficient Data" simply to maintain consistency with the nomenclature in EPA guidance. Although using Pinelands biological data has allowed the Department to reassess many sites and reassign them to either Sublist 1 or 5, Sublist 3 represent sites where the biological condition is known and the Department has no clear thresholds that delineate acceptable and unacceptable biological communities. Until criteria are developed, the Department will employ a conservative approach and use Sublist 3 for waterbodies for which the impairment and hence listing status are unclear. They will be moved off this Sublist when a method of assessing macroinvertebrates in Pinelands habitat is developed or these sites can be assessed using alternative indicators such as biological data collected by the Pinelands Commission. Twenty-six sites have been placed on Sublist 3 until refinements can be made regarding thresholds between acceptable and unacceptable biological communities within the Pinelands.

**Comment 6:** There are several AMNET sites which fall outside the Pinelands Area, but are located within the Pinelands National Reserve. A portion of the drainage area for many of these sites is located within the Pinelands Area and some streams display typical Pinelands water-quality and biological characteristics. We suggest that the political boundary of the Pinelands Area not be used to separate Pinelands and non-Pinelands waters, but rather encourage the use of water-quality and biological characteristics to distinguish them. (2)

**Response to Comment:** The Department agrees that there are AMNET sites outside of the Pinelands Area that possess the same physical/chemical characteristics as waters within the Pinelands Area and should be assessed using biological assessment methods appropriate to this Area. This is true for chemical and biological assessments. The Department will reevaluate the appropriateness of our Surface Water Quality Standards in characterizing these transitional areas.

Comment 7: Approximately 85 sites assessed using biological data provided by the Commission have been classified by the NJDEP as having "Insufficient Data" and placed on Sublist 3. The classification of "Insufficient Data" is completely inappropriate for these sites for several reasons. First, the Commission has biological data for all of these sites and, for the vast majority of the sites, the data are represented by more than one taxa. Second, we would not have been able to rank these sites, or any other sites, if there were insufficient data. Finally, the relationship between the Commission's biological data and observed water-quality degradation has been fully quantified and published. Because these sites are located primarily along the middle of the water-quality degradation gradient, we strongly recommend that they be classified with some term that indicates they are intermediate between the "Full Attainment" and "Non Attainment" classes. We cannot support the "Insufficient Data" classification. (2)

**Response to Comment:** See Response to Comment 5, second paragraph.

**Comment 8:** The McDonalds Branch at USGS gage in Woodland site should have a rank of 5 (Full Attainment) rather than 3 (Insufficient Data). (2)

**Response to Comment:** McDonalds Branch at USGS gage in Woodland is currently listed as Fully Attaining.

**Comment 9:** There are a number of instances where the NJDEP station name/waterbody do not match the Commission site code. These should be rectified: (2)

**Response to Comment:** The Department agrees with the comment and has made the necessary changes.

**Comment 10:** The commenter identified several impoundment sites surveyed by the Pinelands Commission scientists and ranked. These sites were not included in the 2004 *Integrated List*. (2)

**Response to Comment:** All waterbodies identified by the commenter are now listed on the Integrated Report with the exception of: Skit Branch beaver impoundment above Carranza Roads. This site is a beaver created impoundment. The Department identifies only naturally occurring (glacial, alluvial dam, and sinkhole) lakes and manmade impoundment on the Integrated List.

**Comment 11:** All listings should include Site ID Numbers associated with every discrete Station/Waterbody named on the Sublists. (3)

**Response to Comment:** The Department agrees with the comment and has added this information.

Comment 12: In addition, some Station/Waterbody Names are associated with different Site ID Numbers and recorded as separate segments. While this may not directly affect the counting and tracking of the overall number of segment/pollutant combinations, it remains difficult to discern if these Stations/Waterbodies are the same segments or if one of the station/waterbody units is a portion of the larger segment. (3)

**Response to Comment:** The Department provides GIS coverages which, when referred to, will help clarify the spatial location of the waterbody and identify any areas of overlap.

Comment 13: The inconsistent application of Site ID Numbers makes it difficult to discern the actual number of segment/pollutant combinations included on the 303(d) List. For example from the 2004 draft 303(d) list, site 25 is listed twice: once alone for Phosphorus and Fecal Coliform, and once in combination with site 01407868, which was labeled 01407868/25. It is unclear if the two Site IDs for Longbrook at Wyckoff Mills refer to different portions of the waterbody or if the two Site IDs have been combined for the 2004 draft 303(d) List. (3)

**Response to Comment:** The Department agrees with the comment and has corrected the listings to alleviate the double listings.

**Comment 14:** In 2002, lead was included on the 303(d) List for this segment. In the 2004 303(d) list, lead was moved from Sublist 5 to Sublist 3. Because Sublist 3 indicates that there is not enough information to make an assessment, it would also imply that there is not enough information to make a delisting decision. Therefore, lead for Hammonton Creek at Westcoatville should remain on the 2004 303(d) List. (3)

Response to Comment: New data showed no exceedence of SWQSs. However, the SWQS for lead in

this waterbody is lower than the detection level. The Department took the conservative approach and listed the waterbody on Sublist 3 rather than Sublist 1 until we have sufficient laboratory capability to assess at the detection limit.

**Comment 15:** Saddle River West Br. at Upper Saddle River was originally listed for Fecal Coliform on the 2002 303(d) List and does not appear on the 2004 303(d) List. The Department must account for Saddle River West Br. at Upper Saddle River/Fecal Coliform on the 2004 303(d) List by either listing it on Sublist 5 or by justifying it's delisting and identifying it's placement onto one of the other Integrated Report Sublists. (3)

**Response to Comment:** This waterbody is listed on Sublist 4 for Fecal Coliform as a TMDL has been approved by USEPA.

**Comment 16:** On Sublist 1, Primrose Brook at Morristown National Park (01378780) only displays Dissolved Oxygen, Dissolved Solids, and Nitrate as parameters included on the list. However, in the spreadsheet, Primrose Brook at Morristown National Park lists phosphorus, fecal coliform, temperature, pH, total suspended solids, and unionized ammonia on Sublist 1. To avoid confusion, please reflect all applicable parameters and their compliance with water quality standards in both the spreadsheet and on Sublist 1.(3)

**Response to Comment:** The Department agrees with the commenter and has made the suggested correction.

**Comment 17:** For the Great Egg Harbor at Weymouth location, lead is delisted, yet no justification is provided for the delisting. The 2004 303(d) List should be revised to include a justification for delisting lead at the Great Egg Harbor at Weymouth. Several stations are delisted for reason 1B, which indicates that new information demonstrates that the segment is now meeting water quality criteria for the previously listed pollutant. However, none of these segment/pollutants appear on Sublist 1 and the source of the new information is not identified. The 2004 Sublists should be revised to include these segment/pollutant combinations on the appropriate sublist. (3)

**Response to Comment:** The Great Egg Harbor at Weymouth location has been delisted for lead due to new information. The Integrated List has been corrected to reflect this. The Department uses fish consumption data to identify impaired waterbodies. The Methods Document does not identify a method to evaluate data outside of the fish consumption advisories for listing Full Attainment waters. The Department will look at developing a method to incorporate toxics data from fish tissue that shows no toxicity with data from the water column which may or may not show toxicity.

Comment 18: Several segment/pollutant combinations listed the 2002 Integrated Report Sublists cannot be tracked on any of the proposed 2004 Integrated Report Sublists. For example, the Pompton River at Pompton Plains for dissolved oxygen was on Sublist 1 and several segments (Hammonton Creek, Toms River and the Great Egg Harbor) were listed on Sublist 3 for silver. Please identify where these segments/pollutants can be found on the 2004 Integrated Report Sublists. (3)

**Response to Comment:** The Pompton River at Pompton Plains has been added to Sublist 1 for dissolved oxygen. The sites listed for silver were erroneously listed on Sublist 3 in 2002. The Department does not have any silver data for these waterbodies.

**Comment 19:** The Department should better justify the decision to consider or to exclude data based upon the criteria outlined in the 2004 Monitoring and Assessment Methodology.(3)

**Response to Comment:** The Department will discuss the rational for excluding any data in the Integrated List Report as noted in the Methods Document. No data was excluded in developing the 2004 Integrated List.

**Comment 20:** The Department is defining some FW2-NT waters as Pineland-like in terms of their assessment. Even if some FW2-NT waters are Pineland-like, FW2-NT waters are associated with specific water quality criteria. The 2004 Sublists should specify which FW2-NT waters the Department identifies as Pineland-like, and the 2004 Monitoring and Assessment Methodology should clarify the assessment of these Pineland-like waters in regards to the appropriate, current New Jersey SWQS. (3)

**Response to Comment:** Pinelands-like waterbodies are presently classified as FW-2 waters and are being assessed using the criteria for FW-2 waters until the Department addresses this issue in its SWQSs. Pineland-like waters not meeting FW-2 criteria are placed on Sublist 5.

Comment 21: The Region concurs with Department's response concerning minimum sample size for toxic parameters being included in the table and apologizes for misreading the table associated with toxic parameters. However, the Region questions Department's interpretation of water quality criteria for toxic parameters in relation to limited sample sizes. The Department's Monitoring and Assessment Methodology states that "a single exceedence is not sufficient to determine the attainment status of a site", therefore, "non attainment" waters require at least two exceedances to confirm water quality does not meet SWQS. This ensures that even with additional sampling, which would meet the recommended data requirements, the assessment result will not change" (Page 11). In addition, the Department's methodology states that for modified assessment of toxic parameters, when two or more samples exceed the SWQS, the assessment unit is considered "non-attainment" (Pg. 18). In keeping with the Department's Monitoring and Assessment Methodology as described above, the USEPA Region II strongly recommends listing waters that exceed aquatic life criteria for toxic pollutants more than once in three years, regardless of sample size and sampling frequency. (3)

**Response to Comment:** The Department uses the modified assessment method on a case by case basis which allows the Department to insure that a small data set is, in fact, representative of the overall conditions of the waterbody. For example, 2 samples taken a day apart would not be considered representative of the waterbody over a three year period.

Comment 22: Based upon the description of estimated waters in the Department's Assessment Methodology, Estimated waters are extrapolated from monitored waters based on land use and will be used for sublist 3 only, given the lower degree of confidence (Pg. 42). The Response to Comments document states that "the Department does not place estimated waters on Sublist 3 at this time" (Pg. 8). Given the two opposing statement, it is unclear if estimated waters are included in Sublist 3. The Department should rectify the inconsistency between the Assessment Methodology discussion and their Response to Comments. The Department should provide descriptions of the different waters included on the 2004 Sublist 3, such as: waters scheduled for future monitoring, waters included on Sublist 3 because the only information associated with them are derived from models, and waters without associated monitoring or modeling information that are not scheduled currently for monitoring. (3)

**Response to Comment:** The Methods Document states that the Department may place estimated waters on Sublist 3 (as opposed to Sublists 1, 4 or 5). For 2004, the Department has not placed the estimated waters on Sublist 3. It is anticipated that many of the estimated waters will be monitored prior to the 2006 Integrated List and will be placed on the appropriate Sublist at that time. The Department may break down Sublist 3 in the future, but at this time, all waterbodies that require additional monitoring and/or assessment tools are on Sublist 3.

Comment 23:The USEPA Regions and States want a consistent assessment of the main stem of the Delaware River, and have agreed to have the Delaware River Basin Commission assess the main stem of the Delaware River to ensure consistent assessments and listings. While USEPA Region II acknowledges that the Delaware River Basin Commission's Assessment Methodology and assessments of the main stem of the Delaware River were not yet complete and were unavailable during Department's public comment period, USEPA Region II stresses that the Department should inform the public when the Delaware River Basin Commission releases the Assessment Methodology and assessments. The Department should subsequently public notice any changes to the New Jersey 2004 303(d) List due to the Delaware River Basin Commission's assessment. (3)

**Response to Comment:** The Department has incorporated the Delaware River Basin Commission's assessment into the 2004 Integrated List and has public noticed the changes on March 1, 2004.

**Comment 24:** The Department inconsistently presents bacteriological information and phosphorus information on the Integrated Report Sublists. Bacteriological information may be presented as fecal coliform, total coliform, or pathogens. To avoid confusion and to make reporting of segment/pollutant combinations in the categories more consistent, please consistently report pathogens as fecal coliform or total coliform depending on the use impairment. In addition, a few segment/pollutant combinations are described as Total Phosphorus as opposed to phosphorus. While phosphorus may be recorded as Total Phosphorus as described in New Jersey's SWQS, please consistently describe the pollutant as phosphorus to lessen any confusion. (3)

**Response to Comment:** The Department agrees with the comment and has corrected the Integrated List.

**Comment 25:** The commenter acknowledges and appreciates the delisting of phosphorus for the Wallkill River at the Sparta and Franklin locations. (4)

**Response to Comment:** The Department acknowledges the comment.

Comment 26: The commenter questions the impairment listing for the Wallkill River at Route 23 in Hamburg, NJ, with regard to Dissolved Solids. The Department has reported that the data source is "Existing Water Quality" (EWQ) data. The commenter has requested EWQ data from the NJDEP. Only a very limited database has been released for public review, and that data does not indicate a basis for impairment. Prior to finalization of the 2004 Integrated List of Waterbodies, the Department should make all pertinent data available to allow for the opportunity of public review of the listing rationale. The Department should summarize the basis of this impairment determination, including total number of samples, and number of samples exceeding the water quality criteria. The sample date and streamflow conditions are also pertinent and should be provided. The Department should consider all appropriate information prior to making a dissolved solids impairment determination for the Wallkill River at Route 23 in Hamburg, NJ. The Wallkill Watershed Management Area (WMA 02) Group has submitted to the Department, a report dated September 30, 2003 and titled "Characterization/Assessment of WMA 02 Surface Waters". This extensive and current database shows all sixty (60) samples in compliance with the surface water quality standard of 500 mg/l for Total Dissolved Solids and supports a determination of non- impairment relative to dissolved solids. The commenter therefore believes that, absent the Department's finding of full attainment for dissolved solids in the Wallkill River, that this location would be better represented on Sublist 3, due to the fact that the Department is relying upon insufficient data to determine attainment of the surface water quality criteria. Such would allow for the collection and assessment of additional data rather than making an impairment decision which conflicts with all other assessments of the Wallkill River. (4)

Response to Comment: The Department has moved the Wallkill River at Hamburg to Sublist 3 for

dissolved solids as suggested. EWO data is available to the public through USEPA's STORET database.

Comment 27: The Department has listed impairments for aquatic life for the Wallkill River at Route 565 in Wantage, NJ, and at Route 94 in Hamburg, NJ. The source is noted to be AMNET data. While the commenter does not question this data, we do however question whether the Department has ever reviewed and/or considered the SCMUA's "Biannual/Final Report of Biological Assessment of the Upper Wallkill River" dated March 1998. This report reflects a 5 year study which was performed under a NJDEP approved QA/QC Work Plan. The conclusion of that study, which included both spring and fall sampling events in 1993, 1995 and 1997, confirms that "poor habitat quality, not poor water quality was the principal limiting factor" in the Wallkill River system. The commenter requests review of said report relative to the determination of the aquatic life impairment status of the Wallkill River. (4)

Response to Comment: The Department has reviewed the report mentioned by the commenter. We assume that the commenter is suggesting that the portions of the Wallkill basin in question be listed on Sublist 4C rather than Sublist 5. While the reports in question suggest that sediment and poor substrate quality may be the principal cause of benthic community impairment\*, it is not clear whether these are the only causes of impairment at these locations. The possible impacts from toxic substances from the many industrial outfalls in the watershed as well as pesticides from agriculture and developed areas have not been evaluated. In addition, the impacts from stormwater outfalls have not been assessed. While the Report presents data and conclusions regarding the impact of the SCUMA Treatment plant upgrades, there are other potential sources of impairment within the watershed, which the Report does not address. The Department, as part of the TMDL process, will evaluate all potential causes if biological impairment and will at that point makes decisions as to the suitability of listing these waters on Sublist 5 and moving forward with a TMDL(s).

\*It should be noted that the DO status of the these waters is highly variable with violations of the State's SWQS being observed in 6 of the 7 stations during sampling in May 1995 which makes this Department call into question the conclusion that water quality is not a potential contributor to benthic impairment. Although at other times (including the most recent sampling) the DO status of these waters appears acceptable, perhaps the DO status should be explored with diurnal sampling.